



# CITY OF SAN ANTONIO

## FIRE DEPARTMENT

TO: Participating Fire Sprinkler Contractors

SUBJECT: **INFORMATION BULLETIN #140**  
Hydraulic Calculation Requirements for  
Automatic Fire Sprinkler System Modifications

DATE: January 2, 2008

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The San Antonio Fire Department (SAFD) and Development Services Department (DSD) require that all water based fire protection system plans be reviewed for code compliance for all such permit applications related to the installation, rehabilitation, or modification of any system. As a customer service initiative, SAFD offers this guideline regarding modifications to existing fire sprinkler systems that can not utilize Information Bulletin (IB) 109 Fire Sprinkler Modifications Involving Twenty (20) Heads or Less.

The following is a projected path that the fire sprinkler contractor (FSC) and the City of San Antonio (COSA) staff are to utilize when applying this policy.

### Procedures:

1. FSC shall complete a Fire Sprinkler Permit Application (IB 107) and include plans and associated submittal information to review the project per the checklist included in the application.
2. If work needs to begin, a Fast Track Permit (IB 108) may be requested through SAFD.
3. Hydraulic calculations, performed in accordance with the applicable NFPA codes, are required to be submitted for review in accordance with IB 107, if any of the following situations or scenarios pertain to the project:
  - a. The type of heads being affected are extended coverage or residential.
  - b. The occupancy hazard classification is changed to a more hazardous classification (e.g. Light to Ordinary, Ordinary Hazard Group 1 to Ordinary Hazard Group 2, Ordinary Hazard to Rack Storage) than the system was originally designed for.
  - c. The storage commodity classification and/or configuration changed to a more hazardous classification (e.g. Class I to Class IV or Class IV to Plastics).
  - d. The first tenant finish-out of a shell building that affects the existing sprinkler system.
  - e. The addition to a building and/or fire sprinkler system.
  - f. Any two sprinkler heads are being connected to a single outlet. *Exception: If it is demonstrated that the extent of the modification is minor and does not exceed the*

*system capacity, hydraulic calculations may not be required. This will be determined by COSA Sprinkler Plan Reviewer.*

- g. More than 100 sprinkler heads are being relocated with one sprinkler head per outlet.
- h. The changes being made are in the original most remote and/or most demanding area previously calculated.

Please be aware that these projects are required to be permitted per IB 107 which includes a copy of current flow test and current fire pump test results, as applicable.

We hope that this customer service initiative will help you identify and address hydraulic calculation requirements for modifications prior to submitting for fire sprinkler permit review to assist with your project and meeting your schedule.

Should you have any questions regarding the process, please contact the Fire Protection Specialist – Sprinkler Plan Review at 210-207-8160.

A handwritten signature in dark ink, appearing to read "Earl Crayton", written over a horizontal line.

Earl Crayton, Assistant Chief  
Fire Marshal, SAFD